

# **KINGSVILLE DOME URANIUM MINE AREA DATA AND ANALYSIS (A Work in Progress)**

**June 27, 2013**



EPA, Region 6  
Dallas, Texas

José Eduardo Torres  
Petroleum Engineer  
Chemical Engineer

**URI, Inc.**

**Kingsville Dome Project**

**TNRCC Permit URO2827**

**Application for Production Area Authorization URO2827-031**

**Dallas, Texas**

**June 25, 1997**

### 3. Mine Area Geology and Hydrology

As has been described in the base permit application, the expansion application and the first two PAA applications, the stratigraphic section of interest at the Kingsville Dome Project is the Pliocene Goliad Formation.

Three mineralized, water-bearing sands have been recognized in the Goliad in an interval from approximately 420 to 810 feet below MSL. These sands vary in thickness from 30 to 50 feet each and have been arbitrarily designated the C, B, and A sands. The B and A sands will be the zones of uranium production. The C sand is shaly and unmineralized in this particular production area. The B and A sands are prolific producers of ground water with typical transmissivities of 9,600 gpd/ft.

Underlying the B and A sands is the A clay and the "AA" sand. The A clay is 10 to 20 feet thick within the production area and is primary aquitard between the production zones and the AA sand. The AA sand is approximately 70 feet thick in the production area and constitutes the first underlying sand.

In other portions of the Kingsville Dome vicinity, the AA sand is mineralized and may be developed for uranium production in the future. The AA sand is a very good producer of ground water with the exception of a couple of areas.

Overlying the B and A sands is a thick shaly zone generally below 400 feet and above 550 feet. This is the interval that contained the C and D sands in PAA's 1 and 2 and has little or no water-bearing capacity. → The C and D sands are predominantly shaled out in this production area. This clay is the primary aquitard between the production zone and the first overlying monitor zone.

The first overlying aquifer is a discontinuous sand that usually occurs at approximately 400 feet. Therefore, URI has labeled this sand the 400' overlying monitor zone. Because the 400' sand is discontinuous, a secondary sand which is continuous throughout PAA#3 and occurs at 250 feet, will also be monitored and similarly is labeled the 250' monitor zone. both sands are mediocre water producers and lie within the Lissie Beaumont Formation.

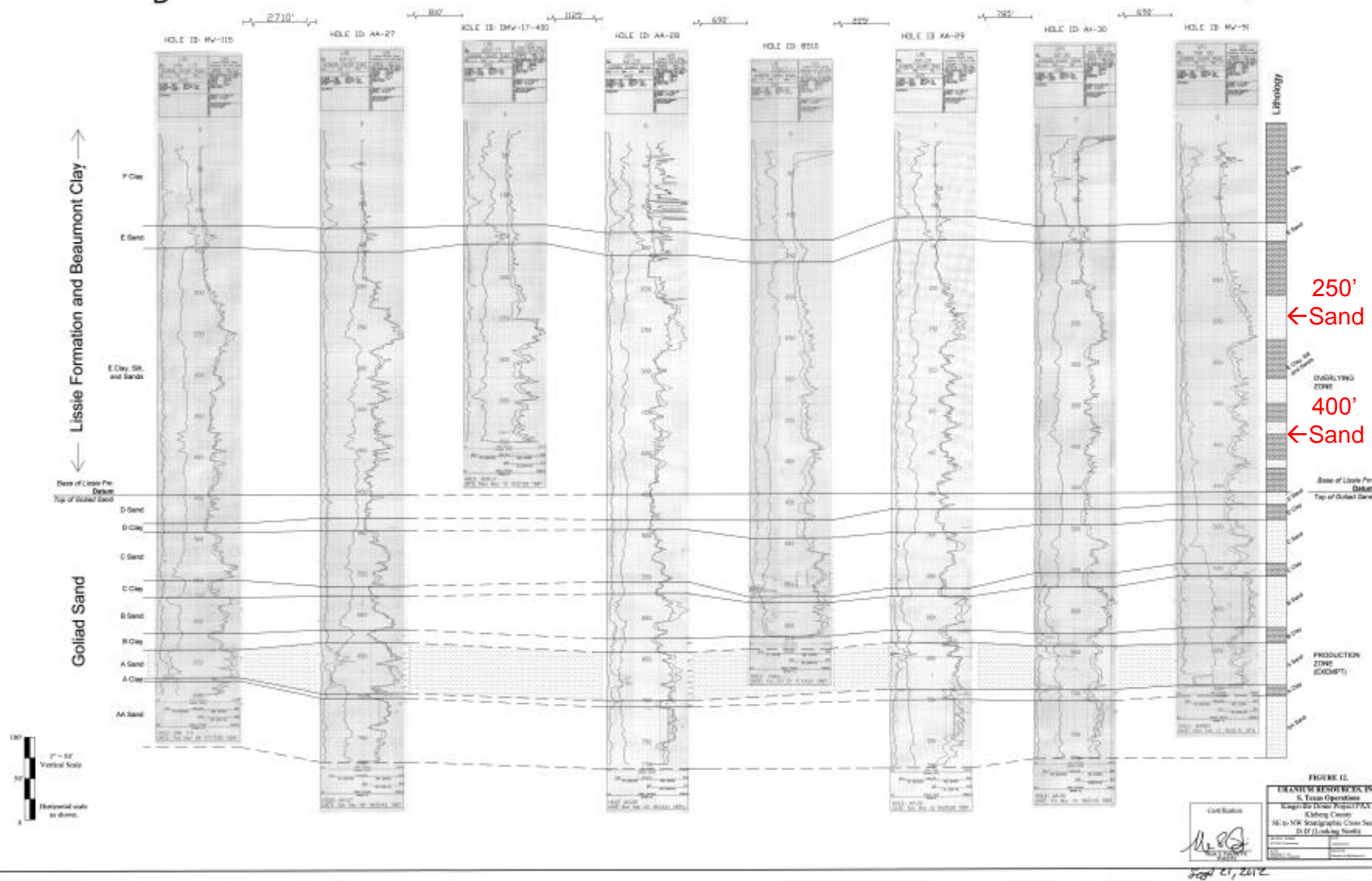
There is a thick zone from the surface to the top of the 250' sand which is mostly discontinuous silts and clays with little or no water-bearing capacity.





D

D'



SE

NW

D-D' Cross Section Illustrated in Map Above



## NEELY WATER WELL SERVICE

Route 1, Box 15 A  
RIVIERA, TEXAS 78379  
296-3225 or 296-3924

No 14012

OWNER

*y. G. Garcia*  
*Roberto Garcia Est.*

9-29-89

## PUMPING EQUIPMENT AND CONDITION

WINDMILL \_\_\_\_\_  
TOWER \_\_\_\_\_  
PIPE ☐ \_\_\_\_\_  
CYLINDER \_\_\_\_\_  
FOOT VALVE \_\_\_\_\_  
PUMP RODS \_\_\_\_\_  
CASING SIZE \_\_\_\_\_  
ELECTRIC PUMP \_\_\_\_\_  
HORSEPOWER \_\_\_\_\_  
PIPE \_\_\_\_\_  
WIRE \_\_\_\_\_  
VOLTS \_\_\_\_\_ AMPS \_\_\_\_\_  
PRESSURE TANK \_\_\_\_\_  
CHECK VALVE \_\_\_\_\_  
PRESSURE SWITCH \_\_\_\_\_  
B & W \_\_\_\_\_  
CASING SIZE \_\_\_\_\_  
FUSES \_\_\_\_\_  
BREAKERS \_\_\_\_\_  
WATER LEVEL \_\_\_\_\_

WHEEL \_\_\_\_\_  
OIL *1-25EL30412 pump*  
HELMET *Complete*  
VANE *210 ft 1 1/4 galv. pipe*  
BUFFER DEVICE *250 ft 10-3 pump*  
SPRING & HOLDER *-with seal 6x1 1/4*  
TAILBONE CASTING *Top 1 inch 2 1/4*  
BRAKE LEVER *1-level control*  
BRAKE BAND *w/1 electric*  
FURL ARMS AND LINK *1-1 1/4 tee*  
FURL YOKE *1-1 1/4 x 6 nipple*  
FURL HANDLE AND WIRE *1-1 1/4 Cap*  
PIVOT BOLT \_\_\_\_\_  
GEARS \_\_\_\_\_  
BEARINGS \_\_\_\_\_  
PITMAN ARM \_\_\_\_\_  
WIRE BRACES \_\_\_\_\_  
ANGLE BRAC \_\_\_\_\_  
GIRTS \_\_\_\_\_  
PIPE BASE \_\_\_\_\_

COMMENTS:

*Left by new well*  
*ordered by y. G. Garcia*

*This is the equip  
ment needed to  
install the well  
(w-24) that URI  
drilled. See also  
"Exploration #59 Affidavit."*

*PDF: See Garcia  
#1627, a water well.  
Look at the second  
to the last well on  
the list of wells.*



## NEELY WATER WELL SERVICE, INC.

No 44142

591 South County Road 1090  
RIVIERA, TEXAS 78379  
(361) 296-3225 or (361) 296-3924

5/15

OWNER

Y/G Garcia

2-705

Garciaville

→ South Well

## PUMPING EQUIPMENT AND CONDITION

WINDMILL

04 D18

TOWER

19- 0465

PIPE ☐

A0407295

CYLINDER

FOOT VALVE

PUMP RODS

CASING SIZE

7" collar

ELECTRIC PUMP

256S 30412

HORSEPOWER

3

PIPE

13/4s 2-2" &amp; 11-1/4

WIRE

10/3 jack

VOLTS

AMPS

PRESSURE TANK

CHECK VALVE

PRESSURE SWITCH

Farnas 42EE/58C May

B &amp; W

CASING SIZE

7" collar

FUSES

BREAKERS

WATER LEVEL

126'

pot @ 273'

WHEEL

1-3hp 4" sub motor

OIL

1-3hp standard control box

HELMET

1-256S 30 water end

VANE

231 ft 1/4 galv pipe

BUFFER DEVICE

235 ft 10/3 jacketed

SPRING &amp; HOLDER

pump cable

TAILBONE CASTING

1-2" x 1/4 galv reduc.

BRAKE LEVER

1 roll 2" tape

BRAKE BAND

FURL ARMS AND LINK

FURL YOKE

FURL HANDLE AND WIRE

PIVOT BOLT

GEARS

BEARINGS

PITMAN ARMS

WIRE BRACES

ANGLE BRACES

GIRTS

PIPE BASE

COMMENTS:

pulled & replaced bad pipe wire & pump & motor. Well pumps off.

W 25



## NEELY WATER WELL SERVICE, INC.

No 44174

591 South County Road 1090  
RIVIERA, TEXAS 78379  
(361) 296-3225 or (361) 296-3924

OWNER

Y G. GarciaGarciaville South Well2-25-05

## PUMPING EQUIPMENT AND CONDITION

WINDMILL \_\_\_\_\_  
TOWER \_\_\_\_\_  
PIPE ☐ \_\_\_\_\_  
CYLINDER \_\_\_\_\_  
FOOT VALVE \_\_\_\_\_  
PUMP RODS \_\_\_\_\_  
CASING SIZE \_\_\_\_\_  
ELECTRIC PUMP \_\_\_\_\_  
HORSEPOWER \_\_\_\_\_  
PIPE \_\_\_\_\_  
WIRE \_\_\_\_\_  
VOLTS \_\_\_\_\_ AMPS \_\_\_\_\_  
PRESSURE TANK \_\_\_\_\_  
CHECK VALVE \_\_\_\_\_  
PRESSURE SWITCH \_\_\_\_\_  
B & W \_\_\_\_\_  
CASING SIZE \_\_\_\_\_  
FUSES \_\_\_\_\_  
BREAKERS \_\_\_\_\_  
WATER LEVEL \_\_\_\_\_

WHEEL \_\_\_\_\_  
OIL \_\_\_\_\_  
HELMET \_\_\_\_\_  
VANE 2-7-05 5hrs  
BUFFER DEVICE 2-25-05 2hrs  
SPRING & HOLDER \_\_\_\_\_  
TAILBONE CASTING 7hrs  
BRAKE LEVER labor  
BRAKE BAND \_\_\_\_\_  
FURL ARMS AND LINK \_\_\_\_\_  
FURL YOKE \_\_\_\_\_  
FURL HANDLE AND WIRE \_\_\_\_\_  
PIVOT BOLT \_\_\_\_\_  
GEARS \_\_\_\_\_  
BEARINGS \_\_\_\_\_  
PITMAN ARMS \_\_\_\_\_  
WIRE BRACES \_\_\_\_\_  
ANGLE BRACES \_\_\_\_\_  
GIRTS \_\_\_\_\_  
PIPE BASE \_\_\_\_\_

COMMENTS:

lulled 3hp pump back out of well.  
brought pump wire & 1 1/4 gals pipe back.

W25

## NEELY WATER WELL SERVICE, INC.

591 South County Road 1090  
RIVIERA, TEXAS 78379  
(361) 296-3225 or (361) 296-3924

No. 43915

OWNER

Y G GARCIA

3-17-05

Garciaville

## PUMPING EQUIPMENT AND CONDITION

WINDMILL

TOWER

PIPE ☐

CYLINDER

FOOT VALVE

PUMP RODS

CASING SIZE

ELECTRIC PUMP

HORSEPOWER

PIPE

WIRE

VOLTS \_\_\_\_\_ AMPS \_\_\_\_\_

PRESSURE TANK

CHECK VALVE

PRESSURE SWITCH

B &amp; W

CASING SIZE

FUSES

BREAKERS

WATER LEVEL

WHEEL

OIL

HELMET

VANE

BUFFER DEVICE

SPRING &amp; HOLDER

TAILBONE CASTING

BRAKE LEVER

BRAKE BAND

FURL ARMS AND LINK

FURL YOKE

FURL HANDLE AND WIRE

PIVOT BOLT

GEARS

BEARINGS

PITMAN ARMS

WIRE BRACES

ANGLE BRACES

GIRTS

PIPE BASE

COMMENTS:

Hooked up city water to storage tank

W24 was  
re-directed.